

# ***Headquarters U.S. Air Force***

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***Integrity - Service - Excellence***

## **SAF/AQXA Capabilities-Based Acquisition**



**7 Apr 04**

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# ***Purpose***

- **Familiarize MAJCOM action officers with the capabilities based acquisition process**
- **Discuss revised Acquisition Process and Guidance to support warfighter requirements**

# Assistant Secretary for Acquisition (SAF/AQ)

Assistant Secretary  
(A)



Dr. Marvin Sambur

SAF/AQ Principal



Lt Gen Corley

## Program Executive Officers (Execution)

AFPEO/AC  
Aircraft  
Systems

LtGen Looney  
BGen Bowlds

AFPEO/C2&CS  
Command &  
Control

LtGen Johnson  
BGen Mahan

AFPEO/WP  
Weapons

MGen  
Chedister

AFPEO/JSF  
Joint Strike  
Fighter

MGen  
Hudson

AFPEO/FA-22  
F/A-22  
Program

MGen Lewis

AFPEO/CM  
Services

Mr Beyland

## Capability Directors (Air Staff)

SAF/AQQ  
Global Reach

MGen Hodges

SAF/AQP  
Global Power

MGen Welsh

SAF/AQI  
Information  
Dominance

Mr Smart

Staff Group  
(AQA)

Scientific Adv. Board  
AF Chair - DSMC

## Functional Directors

SAF/AQC  
Contracting

Mr Williams

SAF/AQL  
Special Programs

Col Bujold

SAF/AQR  
Science, Tech & Eng

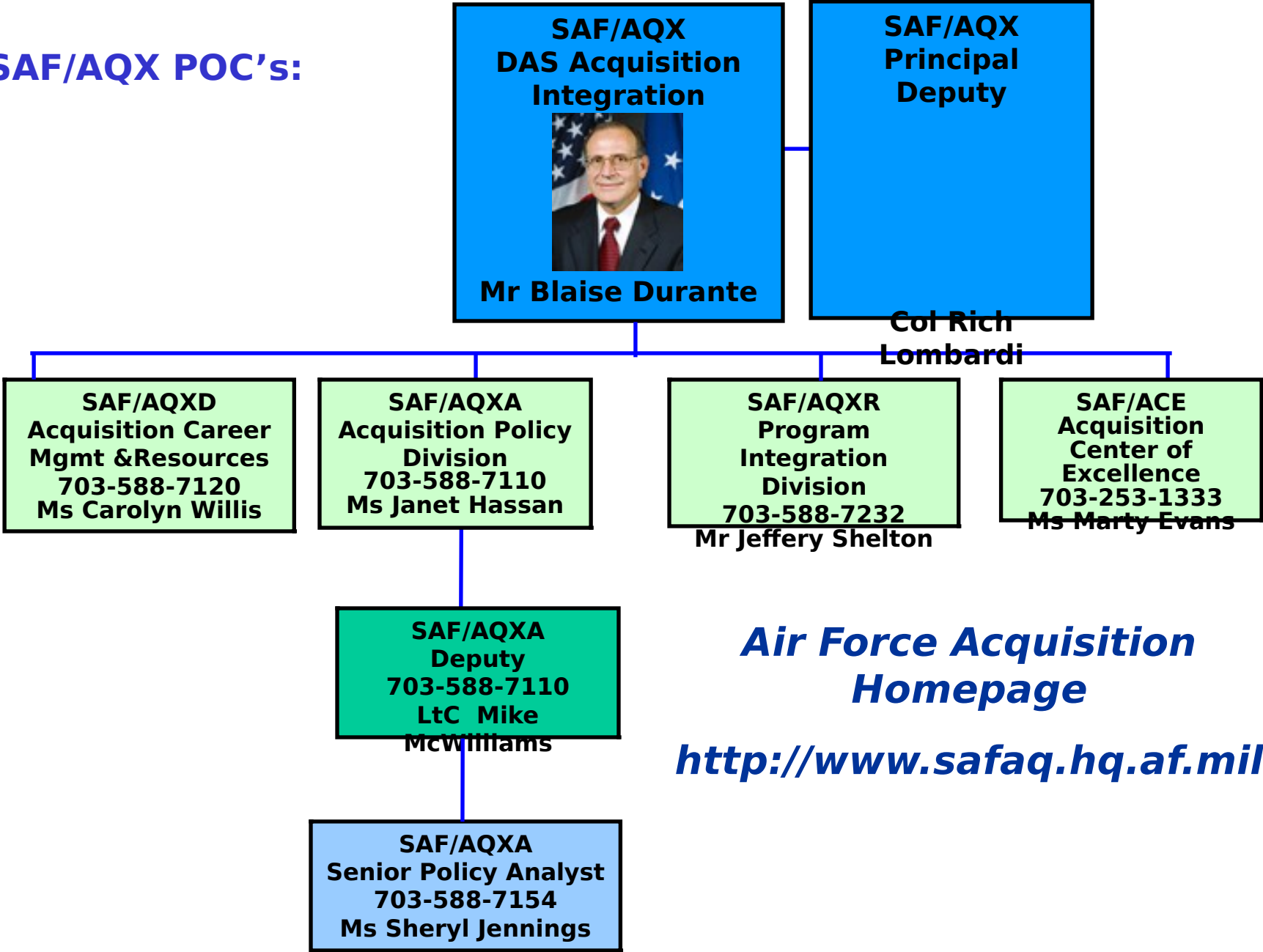
Mr Engle

SAF/AQX  
Acquisition  
Integration

Mr Durante

360+ Military & Civilians; 200+ Support Contractors

**SAF/AQX POC's:**



***Air Force Acquisition  
Homepage***

***<http://www.safaq.hq.af.mil>***



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# ***Agile Acquisition***

## ***Where we're headed!***

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### ***Vision:***

#### ***An Agile Process for Capabilities-Based Acquisition***

- ***Rapidly deliver affordable, sustainable capability that meets warfighter's expectations***
- ***Speed + Credibility = Agile Acquisition***
- ***Enablers are focused S&T, collaborative requirements, and seamless verification***



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# ***Streamlined Policy***

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- **DoD Directive 5000.1**
  - Principles retained; innovation/flexibility emphasized
- **DoD Instruction 5000.2**
  - Detailed discussion of acquisition model
  - Focused on required outcomes and statutory requirements
  - MDA can tailor
- **DoD Acquisition Guidebook**
  - Canceled DoD Regulation 5000.2; characterized as non-mandatory
  - Content will be:
    - **Expectations (TEMP, C4ISP, etc.)**
    - **Best Practices**
    - **Lessons Learned**
  - Guidance on practice and procedure
  - Information retained; available to workforce on Internet
  - Revision underway



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# ***Transformation & Collaboration***

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- **AFPD 63-1: “Speed and Credibility”**
  - **Goals:**
    - **Significant Cycle Time Reduction**
    - **Credibility “No surprises—meet the commitment”**
- **AFI 63-101: “Collaboration is the method”**
  - **Developing Courses of Action (COAs)**
  - **Expectation Management Agreement (EMA)**
  - **Technology Transition**
- **Collaborative development of integrated AFIs**

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**Everyone's challenge - “One Size Will**

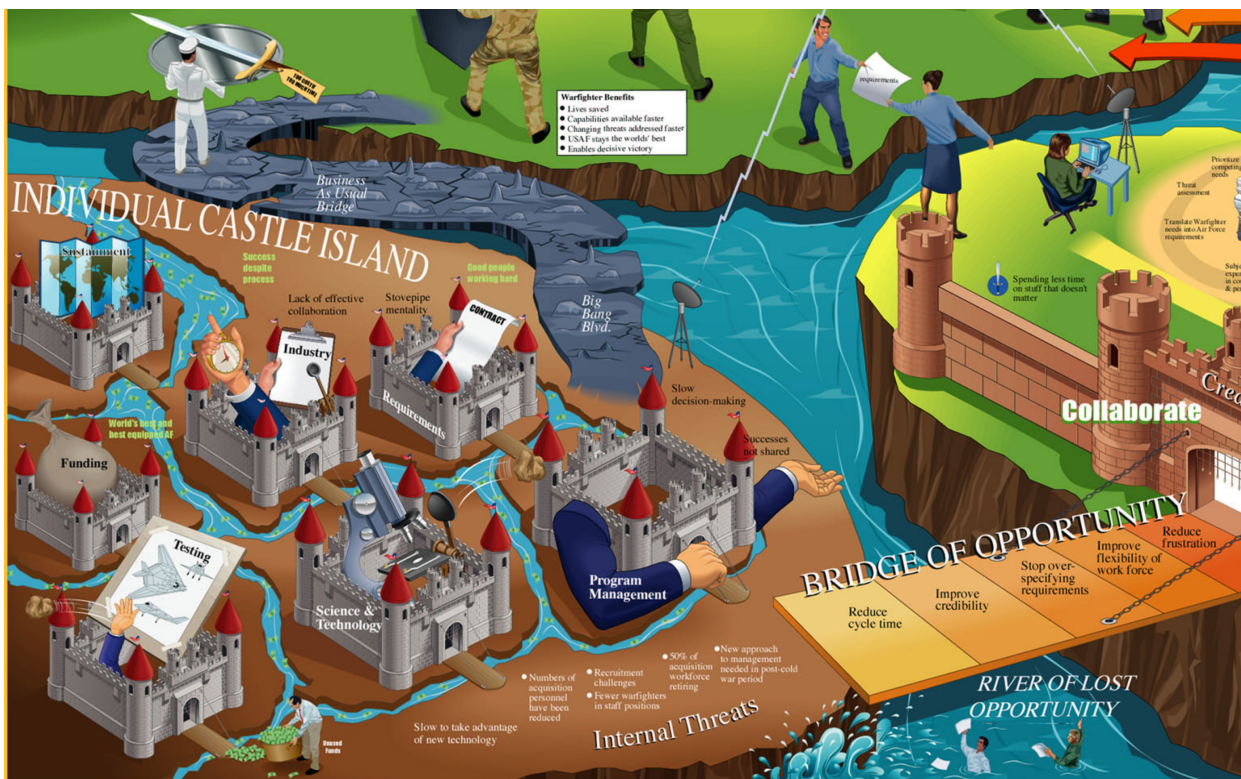
**Not Fit All”** *Integrity Service Excellence*



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# Agile Acquisition Collaboration

We're moving from this...



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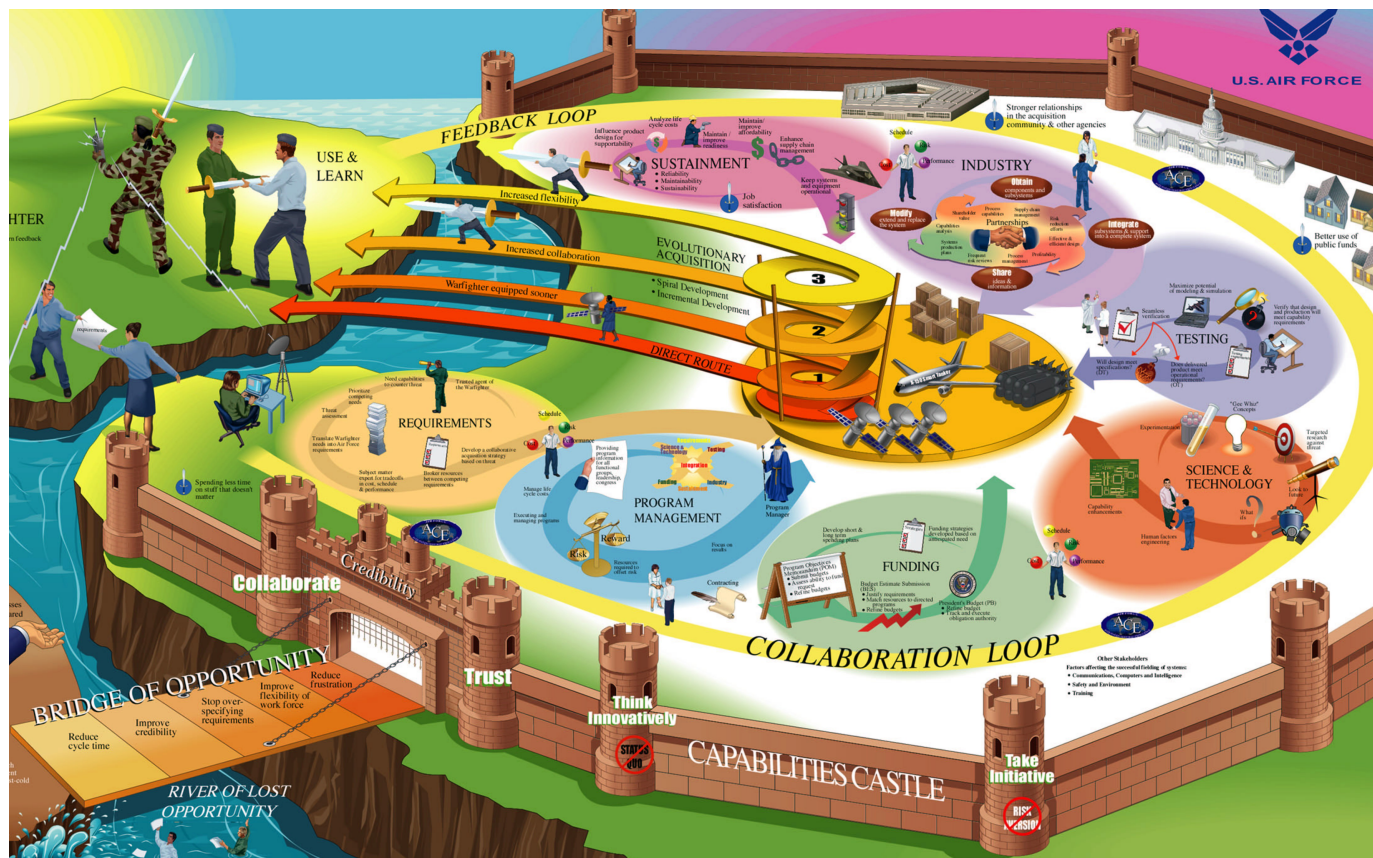




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# Agile Acquisition Collaboration

To  
this...



**SPEED and CREDIBILITY COUNTS!**

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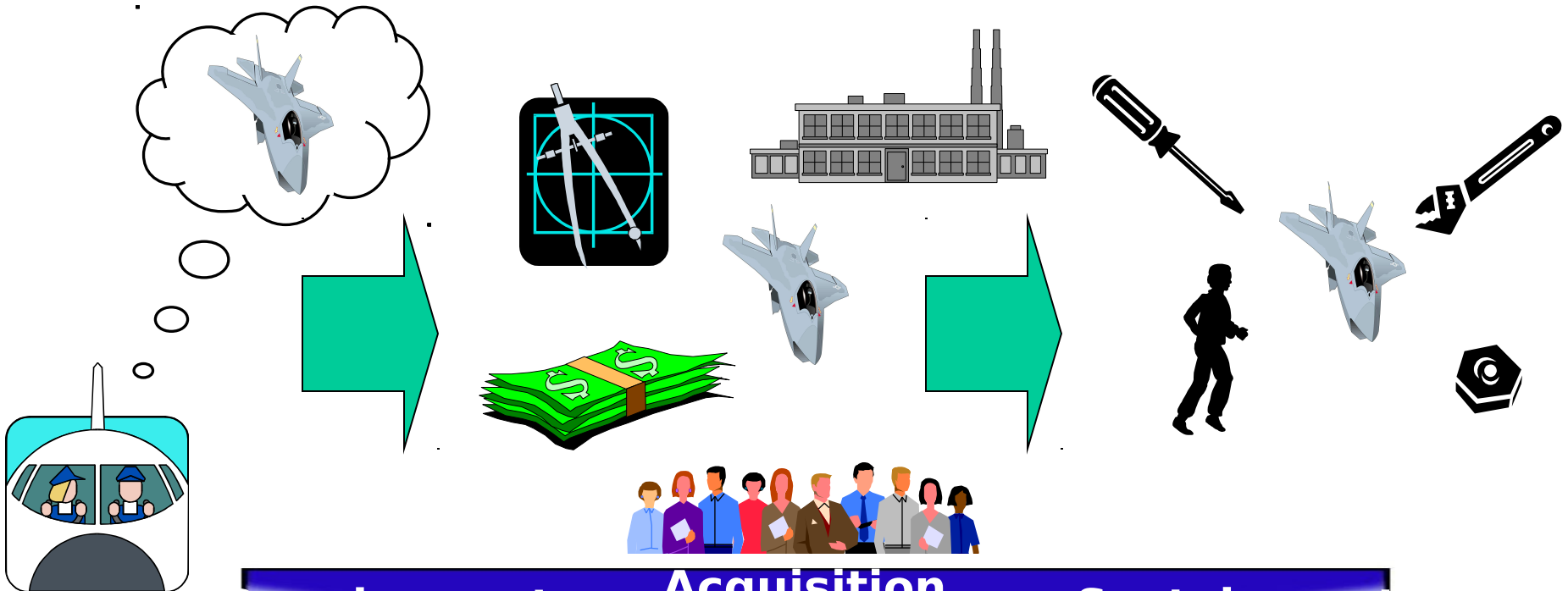
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# Acquisition Process

**Identify  
Needs**

**Acquire  
Capability**

**Sustain  
Capability**



**Requirements      Acquisition & Test      Sustainment**

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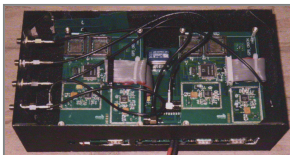
# Acquisition Program Categories

**Categorizes programs by size, cost, and reporting**

**ACAT I** The biggest programs, typically > \$365M\*\* RDT  
\$2.19B\*\* Procurement



**ACAT II** Major programs, typically > \$140M\*\* RDT&E  
\$660M\*\* Procurement



**ACAT III** Everything else

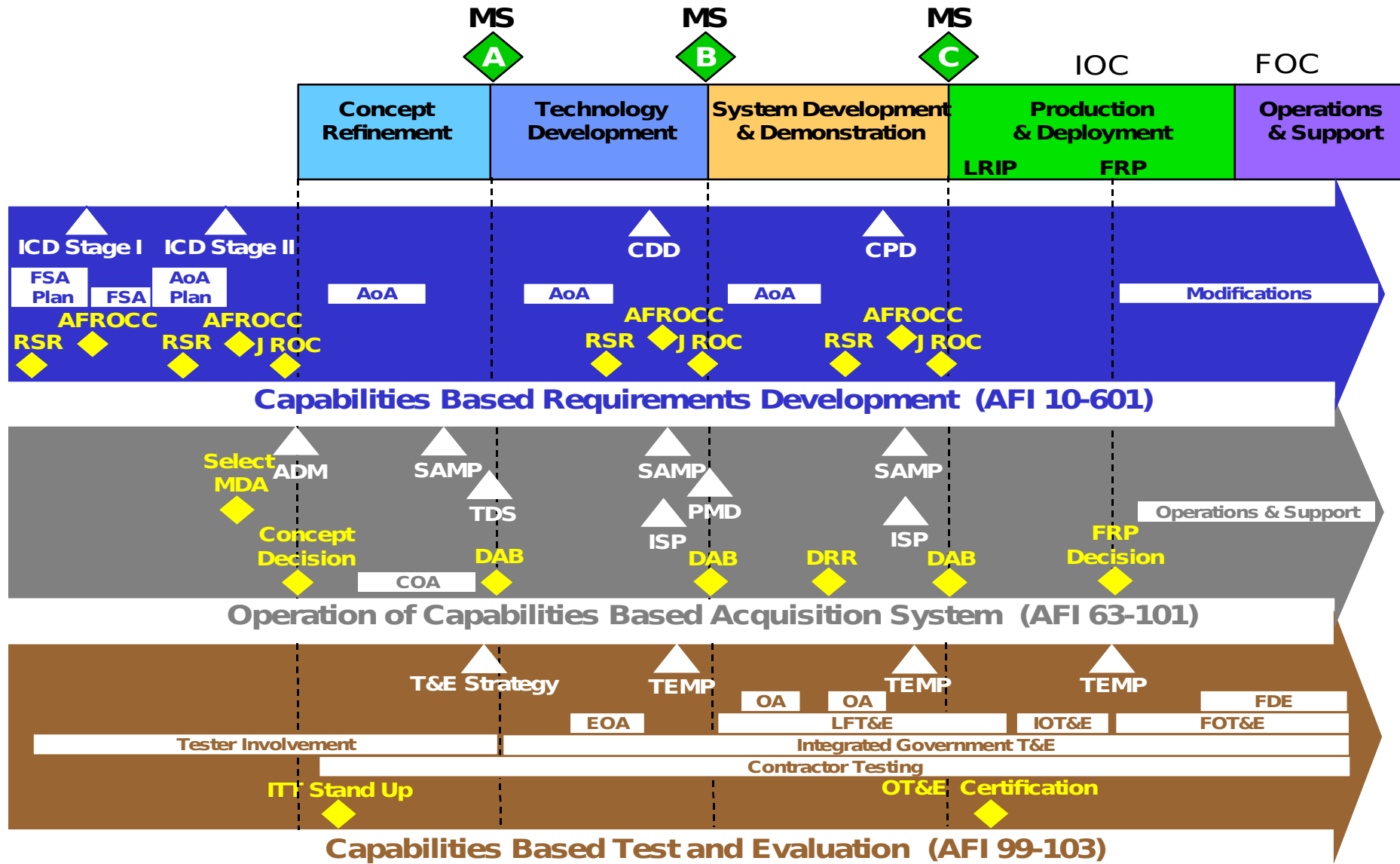


- \* ACAT ID programs report through USD(AT&L) as MDA
- \* ACAT IAM (Automated Information Systems) report through ASD(C)
- \*\* In FY2000 \$'s



# Integrated Schedule

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# Acquisition Management

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User Needs &  
Technology  
Opportunities

- Process entry at Milestones A, B, or C
- Entrance criteria met before entering phases
- Evolutionary Acquisition or Single Step to Full Capability

A

B

C

IOC

FOC

Concept  
Decision

Concept  
Refinement

Pre-Systems  
Acquisition

Technology  
Development

System  
Integration

System  
Demonstration

Design  
Readiness  
Review

System  
Development

& Demonstration

LRIP

Full-Rate  
Prod &  
Deployment

FRP  
Decision  
Review

Production & Deployment

Sustainment

Disposal

Operations  
& Support

Sustainment

Initial Capabilities  
Document (ICD)

Capability Development  
Document (CDD)

Capability Production  
Document (CPD)

Validated & approved by  
Validation Authority

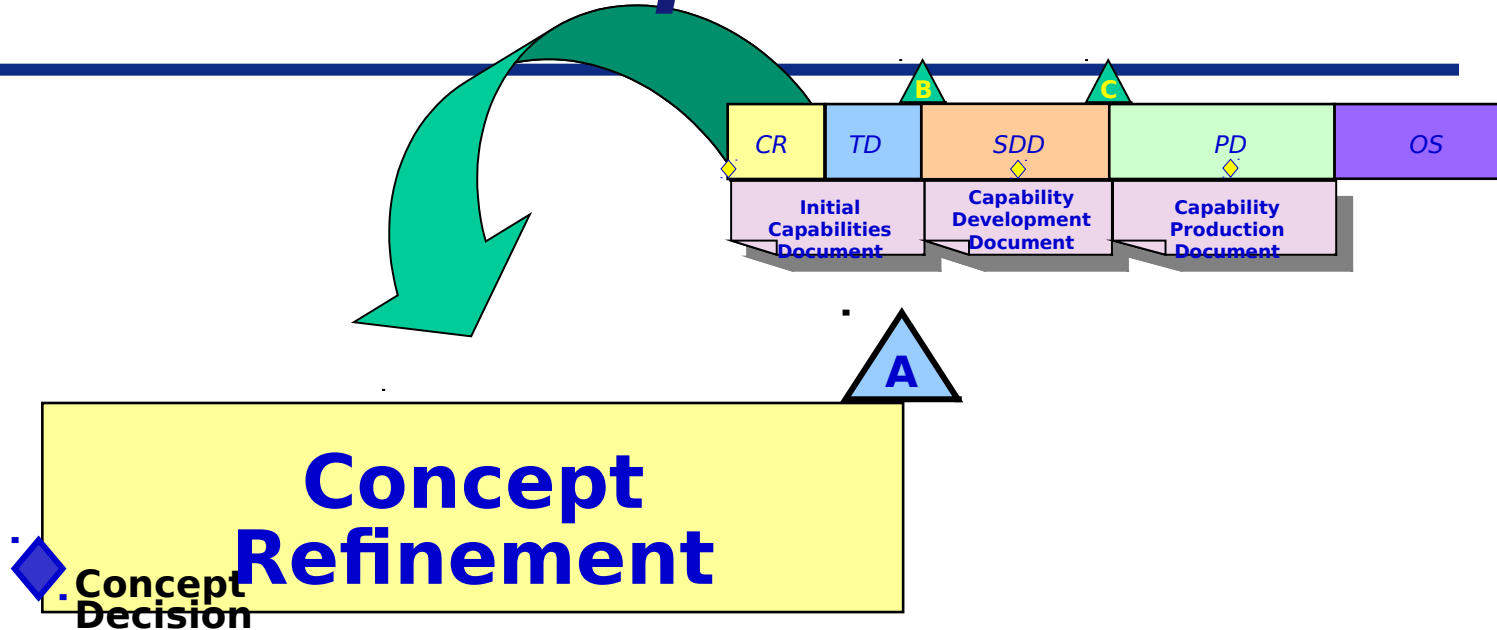
Relationship to Joint Capabilities Integration &  
Development System

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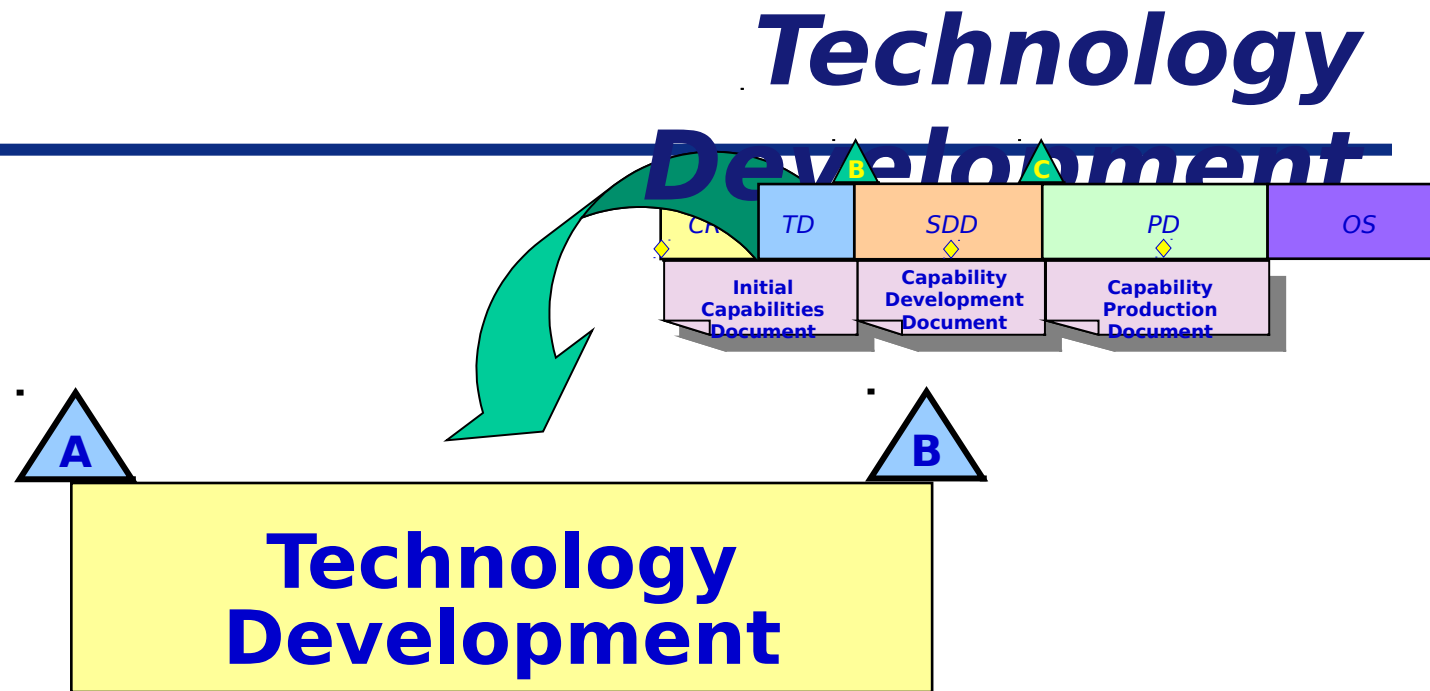
# Concept Refinement



- **Purpose.** Refine the initial concept and develop a Technology Development Strategy (TDS)
- **Entrance Criteria.** Approved Initial Capabilities Document (ICD); approved plan for conducting an analysis of alternatives (AoA); phase funding
- **Exit.** Milestone Decision Authority (MDA) approved preferred solution and TDS



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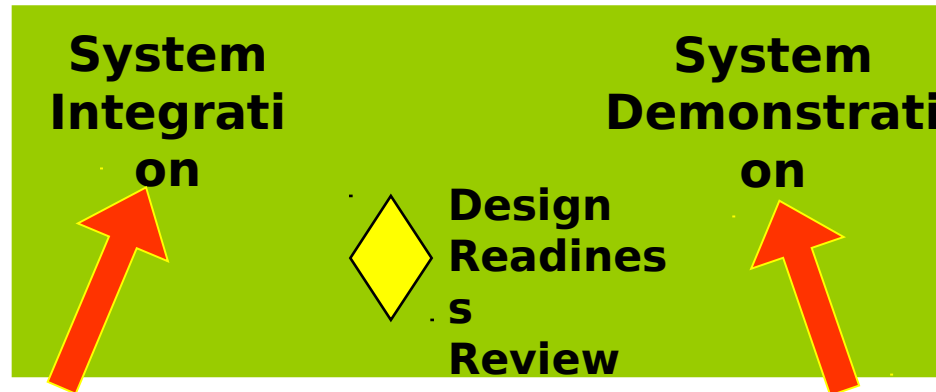
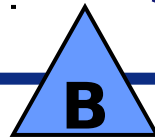
- **Purpose.** Reduce technology risk; determine the appropriate technologies to be integrated into a full system
- **Entrance criteria .** MDA - approved Technology Development Strategy TDS; phase funding
- **Exit .** Affordable increment of militarily - useful capability with technology demonstrated in a relevant environment, and a system that can be developed for production within a short timeframe.





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# System Development & Demonstration



## System Integration

**Enter:** PM has technical solution but has not integrated subsystems into complete system; approved CDD

### Activities:

- System Integration of demonstrated subsystems and components
- Reduction of integration risk
- DT/EOA/preliminary LFT&E

**Exit:** Demonstration of prototypes in relevant

## System Demonstration

**Enter:** Prototypes demonstrated in intended environment

### Activities:

- Complete system demonstration
- DT/OA/OT and preliminary LFT&E

**Exit:** System demonstration in intended environment using engineering development





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# Production & ~~Deployment~~



LRIP



FRP  
Decision  
Review

Full-Rate  
Production  
&  
Deployment



## Low-Rate Initial Production (LRIP)

**Enter:** System matured for production, approved CPD

### **Activities:**

- Low-rate initial production
- IOT&E
- Full-up systems level LFT&E of production-representative articles
- Establish full manufacturing capability

**Exit:** System operationally effective, suitable and ready for full rate production

## Full-Rate Production & Deployment

**Enter:** **Deployment**

- Demonstrated control of manufacturing process
- Satisfactory IOT&E: Beyond LRIP Report to Congress for ACAT I
- Full-up systems level LFT&E (covered systems) & report to Congress

### **Activities:**

- Full rate production
- Deploy system
- Start support

**Exit:** Full operational capability; deployment complete

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# Operations & ~~Support~~



## Sustainment

**Sustainment starts immediately upon fielding or deployment.**

### Activities:

- Maintain readiness and operational capability of deployed system(s)
- Execute operational support plans
- Conduct modifications and upgrades to hardware and software

## Disposal

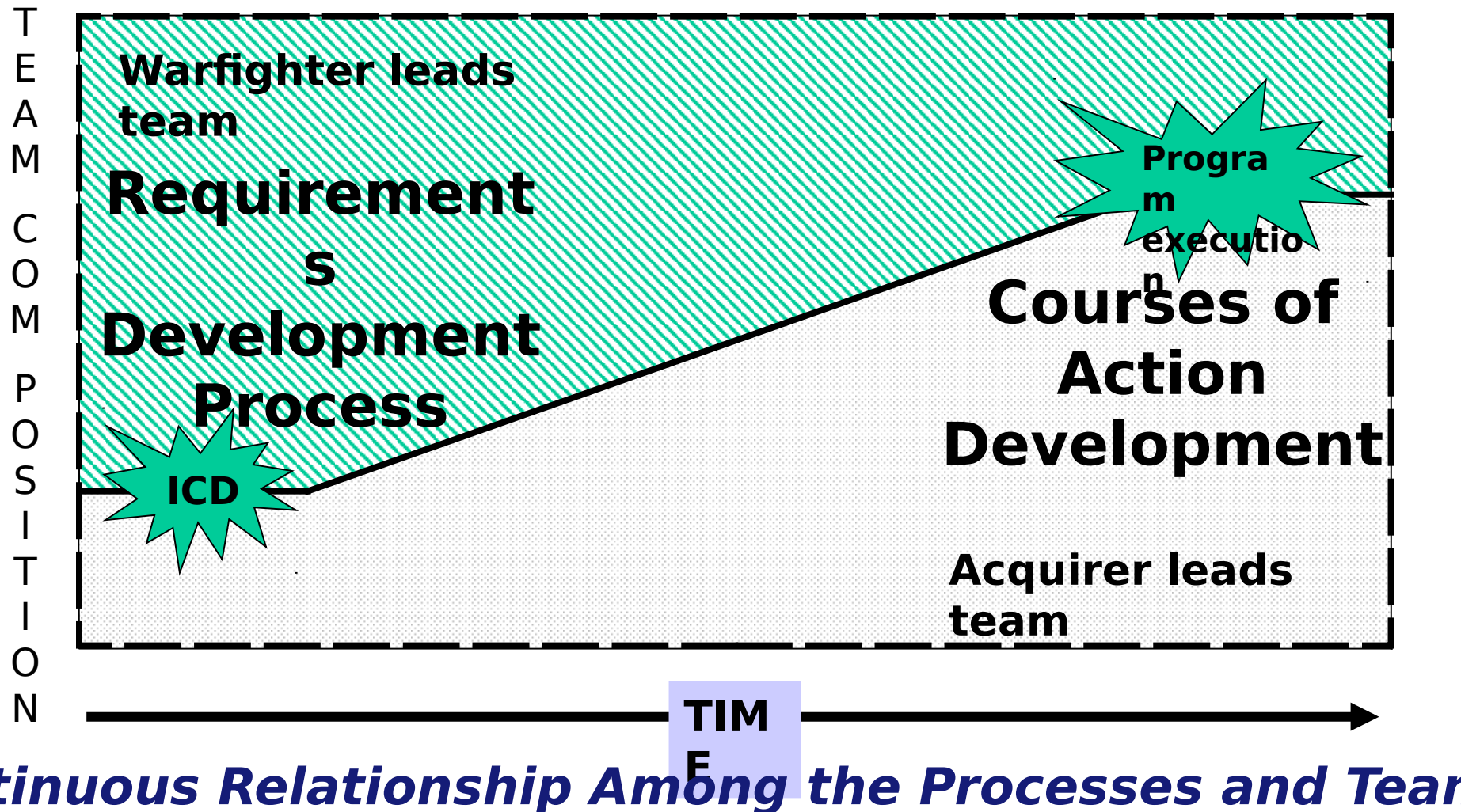
### Demilitarization & Disposal Activities:

- Demilitarize and dispose of systems IAW legal and regulatory requirements, particularly environmental considerations
- Use Defense Reutilization and Marketing Office support, as appropriate



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# *The Path to Credibility: Collaboration*

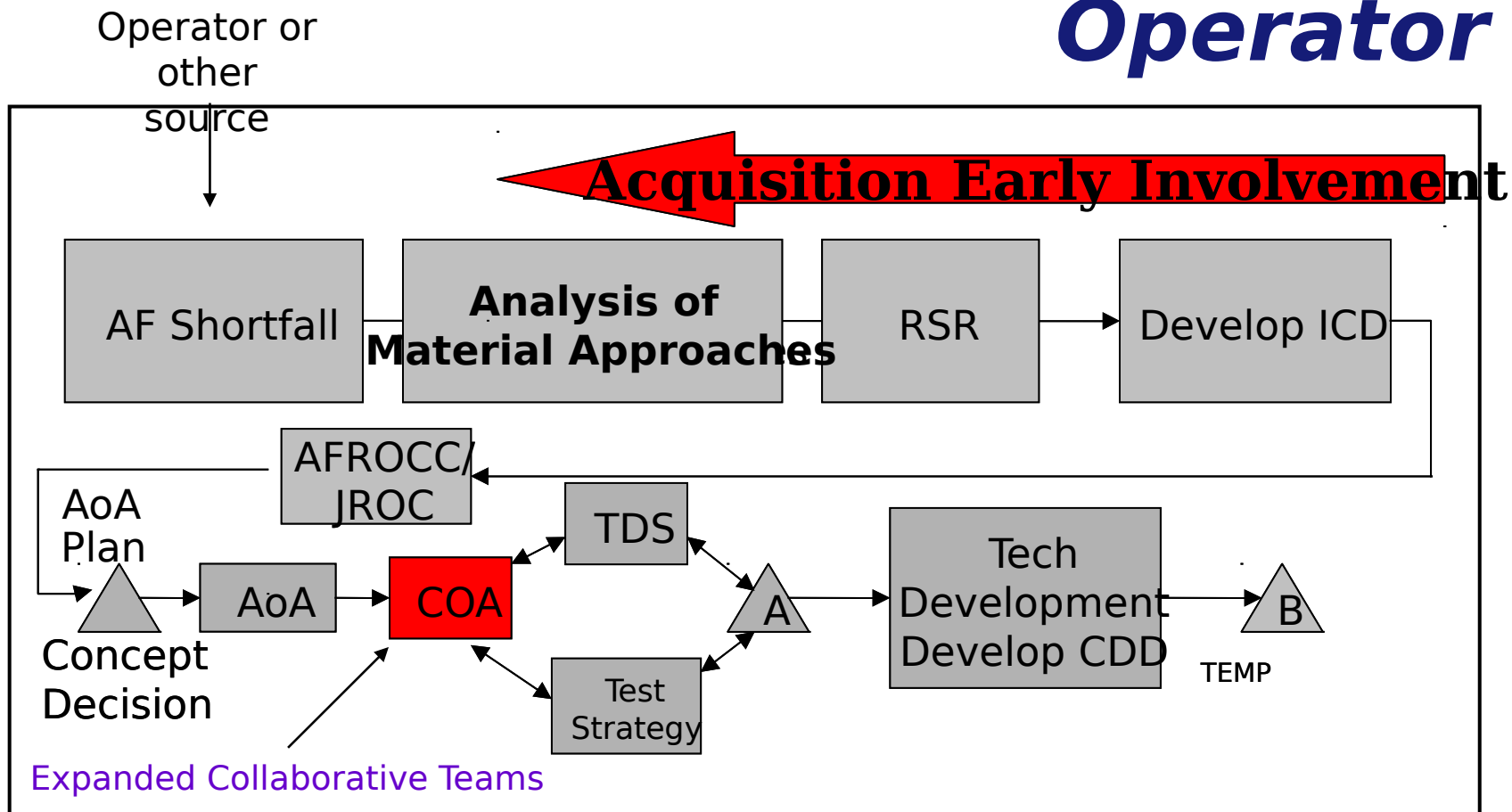


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# COAs: Acquirer in Conjunction with the Operator



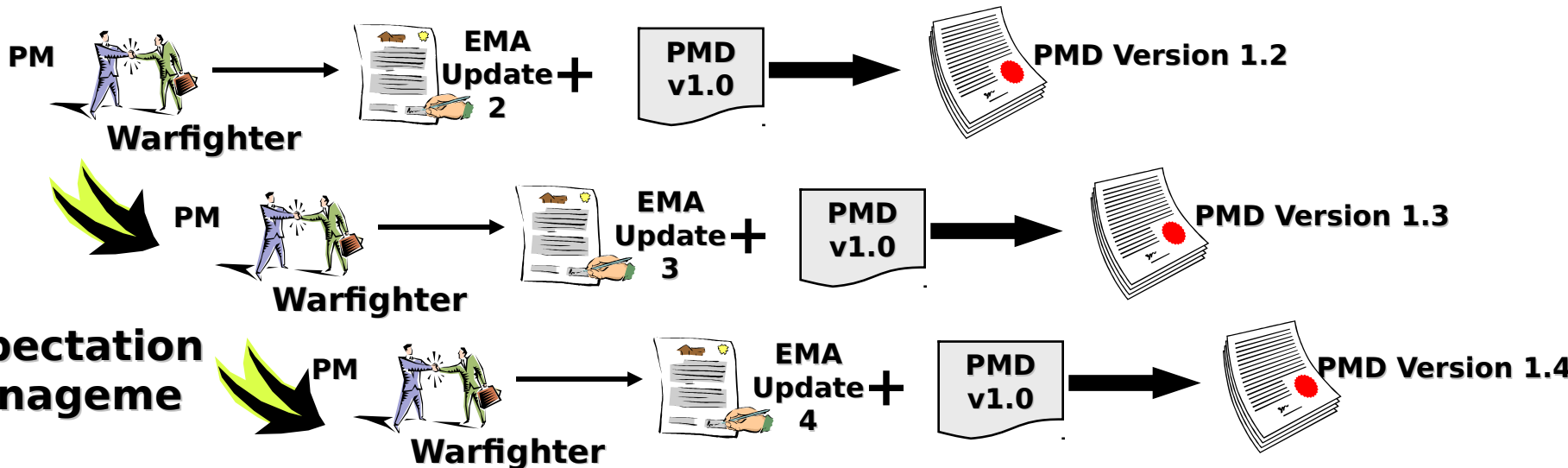
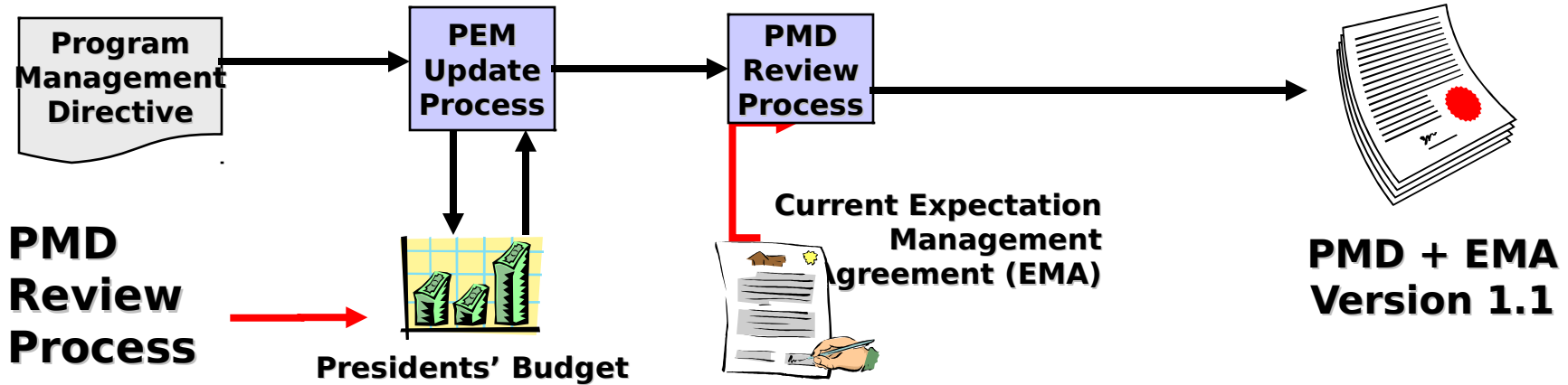
**Key Change: Acquirer leads COA development with the operator**

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# New Expectation Management Process

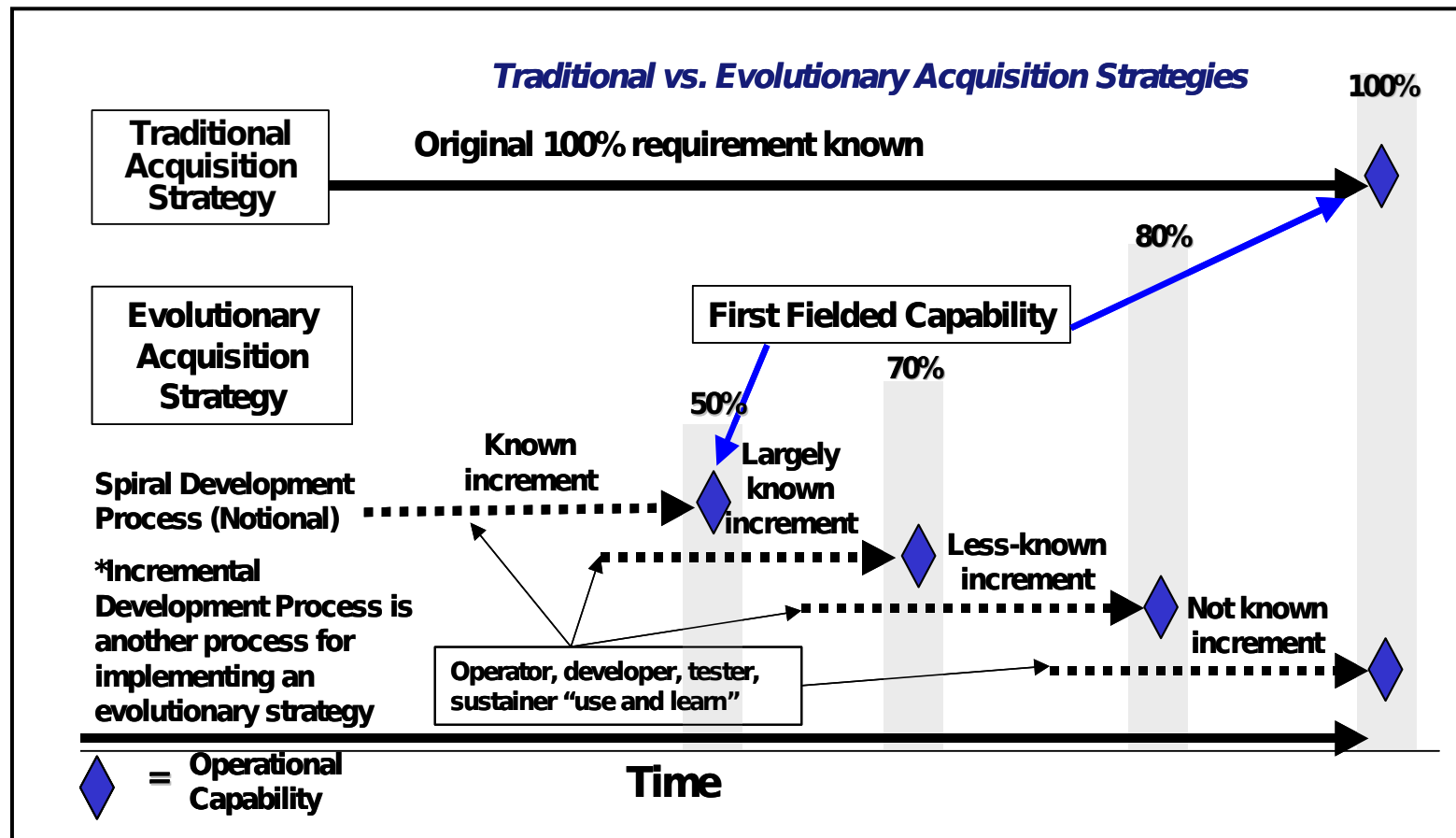


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# Evolutionary Acquisition & Technology Transition



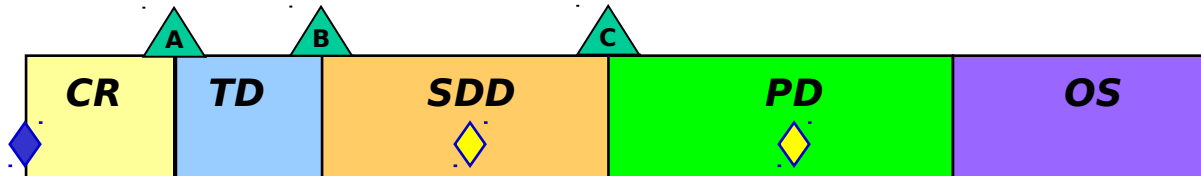
**Every increment will have multiple Milestones (B, C), more test, reqmnt, operator involvement along the way**

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# Evolutionary Approach



## Key

## Issues

- ~~Time-Phased Requirements~~
- Modular Open Systems - facilitates Technology Insertion
- Evolutionary Sustainment Strategies
- T&E Consistent with Evolutionary Approach
- Multiple Milestones (B's & C's); related updates (CDD/CDP, APB, etc.)

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# **Bottom Line: We Are All In This Together**



- **Keep Pace With the Accelerating Technology**
- **Embrace Innovation - Be Entrepreneur**
- **Adapt to and Enable Changing Doctrine**
- **We Deliver What We Promise!!!**

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# ***Summary***

- **Today's threat environment demands agility**
- **Agile Acquisition**
  - **Reduce acquisition cycle time**
  - **Increase Credibility**
- **Programs, People, Processes Key to successful implementation**
  - **Collaboration between AQ, User, Test, and S&T**
  - **Strong partnership between SAF/AQ and AFMC**



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# Air Force Acquisition Homepage

<http://www.saf.aq.af.mil/>



The screenshot shows a web browser window displaying the Air Force Acquisition Homepage. The browser's address bar shows the URL <http://www.saf.aq.af.mil/>. The page features a header with the Air Force logo on the left, the text "SAF/AQ Embracing a New Millennium" in the center, and another Air Force logo on the right. Below the header, the page is organized into several columns of links and information. On the left, there are sections for "Acquisition Excellence" (with links to the Acquisition Center of Excellence, Newsletter, Initiatives, and WRAP), "Acquisition Contracting" (with links to Contracting Toolkit, Workforce, and Policy), "Air Force Biographies" (listing Dr. Marvin R. Sambur, Maj Gen Corley, and Mr. Blaise J. Durante), "PEMs" (with links to the PEM Directory, PEM/AO Course, and PEM/AO Survival Guide), "Directorates" (listing AQA, AQR, AQP, PEO/C2 & CS, and PEO/AT), and "Organization". In the center, there are sections for "Career Development" (with links to Acquisition Training, APMC & EPMC, and ACQ NOW), "Policies" (with a bold notice to review DoD 5000 for updates and links to DoD 5000, Acquisition Policy, and Earned Value Management), "Other Acquisition Links" (with links to Congressional Track Database, MDA Ps, S&E and S&T Issues, and SAF/USA), "People" (with links to Military Promotions and General Interest), "Initiatives" (with links to Reduction in Total Ownership Cost (R-TOC), Paperless, Cycle Time, Single Process, Lean Aerospace, and Evolutionary Acquisition), and "Air Force Reserve" (with links to Program Description and Job Openings). On the right side, there is a section for "NEWS/LINKS" which includes a "Web Site Review" and a list of links: "NEW - AF Agile Acquisition Training Information", "Briefings by Dr. Sambur", "Air Force Homepage", "HAF-Dash 1", "Common Links", "Air Force Fact Sheets", "Deskbook", and "Awards". At the bottom of the page, there is a search bar with the placeholder text "Enter Text Here to Search" and a "Search" button.

**Acquisition Excellence**  
[Acquisition Center of Excellence](#),  
[Newsletter](#), [Initiatives](#), [WRAP](#)

**Acquisition Contracting**  
[Contracting Toolkit](#), [Workforce](#), [Policy](#)

**Air Force Biographies**  
[Dr. Marvin R. Sambur](#), [Maj Gen Corley](#),  
[Mr. Blaise J. Durante](#)

**PEMs**  
[PEM Directory](#), [PEM/AO Course](#),  
[PEM/AO Survival Guide](#)

**Directorates**  
[AQA](#), [AQR](#), [AQP](#), [PEO/C2 & CS](#),  
[PEO/AT](#)

**Organization**

**Career Development**  
[Acquisition Training](#), [APMC & EPMC](#), [ACQ NOW](#)

**Policies**  
**Please review DoD 5000 for updates!**  
[DoD 5000](#), [Acquisition Policy](#),  
[Earned Value Management](#)

**Other Acquisition Links**  
[Congressional Track Database](#), [MDA Ps](#),  
[S&E and S&T Issues](#), [SAF/USA](#)

**People**  
[Military Promotions](#), [General Interest](#)

**Initiatives**  
[Reduction in Total Ownership Cost \(R-TOC\)](#),  
[Paperless](#), [Cycle Time](#), [Single Process](#), [Lean Aerospace](#),  
[Evolutionary Acquisition](#)

**Air Force Reserve**  
[Program Description](#), [Job Openings](#)

**NEWS/LINKS**  
Web Site Review  
• **NEW - AF Agile Acquisition Training Information**  
• **Briefings by Dr. Sambur**  
• [Air Force Homepage](#)  
• [HAF-Dash 1](#)  
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• [Air Force Fact Sheets](#)  
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Enter Text Here to Search

for info write: [Jeffrey.gadway](mailto:Jeffrey.gadway) or [Lionel.mellott@pentagon.af.mil](mailto:Lionel.mellott@pentagon.af.mil)

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***Questions?***